IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	:	Muenzel, Georg
Application #	:	09/822,300
Confirmation #	:	8037
Filed	:	23 March 2001
Application Title	:	Industrial Automation System Graphical Programming Language Storage and Transmission
Art Unit #	:	2193
Latest Examiner	:	Vu, Tuan A.

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION TO WITHDRAW OFFICE ACTION FINALITY

Applicant respectfully petitions the Commissioner to withdraw the finality of the Office Action dated 23 October 2006 due to that Office Action's failure to address the substance of Applicant's arguments traversing rejections of each of claims 1-52.

MPEP 707.07 requires that an Office Action must be complete as to all matters, must provide a clear explanation of all actions taken, and must answer in detail the substance of each of the submitted arguments.

Attached herewith is a copy of an Office Action Reply dated 24 July 2006. This reply traverses, *inter alia*, each rejection of each of claims 1-52 of the Office Action mailed on 16 June 2006. The Office Action, dated 23 October 2006, was issued responsive to this Office Action Reply. The Office Action, dated 23 October 2006, impermissibly and improperly failed to provide a substantive response to the traversals of each of claims 1-52.

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For example, in the 24 July 2006 Reply, Applicant respectfully traversed the rejection of independent claim 1, upon which each of claims 2-18 depend, by presenting claimed subject matter comprised therein that Applicant does not find in the applied portions of the relied upon references. Applicant presented each of the applied portions of the relied upon references and asked specifically how and where each taught the claimed subject matter that Applicant believes that they do not teach. Applicant further pointed out evidentiary deficiencies in the purported suggestion or motivation to combine Dole with Hoskins to arrive at certain claimed subject matter.

The present Office Action failed to address the arguments presented regarding a lack of suggestion or motivation to combine references in any manner whatsoever. Further, rather than provide a substantive response to attempt to demonstrate that the subject matter that Applicant believes to be missing is actually in the applied portions of the relied upon references, the present Office Action merely asserts, at Page 15:

> *[t]he rejection has set forth mappings from Dole to each of the portion of the*
> *above recited subject matter; and it is deemed superfluous (emphasis added)*
> *here to again paste the entire text of rejection in terms of mapping Dole's*
> *applied parts to each of the above limitations and where Dole teachings*
> *require combination with Hoskins. The examiner has -with best effort-*
> *interpreted each of the claimed features (e.g. if there is unclear teaching*
> *from the claim, a claim indefiniteness type of rejection would be set forth)*
> *and correspondingly established parts of Dole that can reasonably be*
> *analogized to each feature (refer to rejection); and Applicant's rebut thereto is*
> *equally expected to be presented in a parallel manner. That is, for each of the*
> *Examiner's mappings (i.e. Dole's cited parts), Applicant has to pinpoint*
> *specific portions and any corresponding deficiency thereof. Until Applicant*
> *detects specific in each of the cited parts with respect to specific language*
> *used in claim 1, the above questions by Applicant can only be viewed as a*
> *attempt to discredit the rejection, but which amounts to an allegation put in*
> *form of questions that can be deemed inappropriate in terms of a prima facie*
> *rebut to the Office Action. It is observed that should there be some flaw in the*

Office Action such as to failing to establish the initial burden (to exhibit how each feature has been met), it also incumbent to the Applicant in return to point out such Office Action's deficiency in terms of showing very specific cited parts of Dole (that is each of them if possible) which are deemed improper; and correspondingly explain their weakness or deficiencies with regard to the <u>corresponding</u> claimed feature. The rebut of the Applicant amounts to: (i) repeat the claimed subject matter, (ii) reciting a portion in Dole discussing on evolving of markup language and HTML with no explanation whatsoever about the construct or language of the Rejection commensurate to a clear deficiency in addressing a particular feature, then (iii) asking where in Dole each of the parts of the claimed features are shown, The addressing of the 'converting ... logic controller' limitation has been set forth in 2 parts, the first part is the markup language part mapped with Dole, the second in the automation program in industry of PLC, fulfilled with the combination Dole/Hoskins. And to rebut this, the applicant has insufficiently attacked each such part of the rejection. For instance, until specifics on each of the Dole's cited parts are identified as faulty, it is deemed that a possible rebut (against Applicant's argument if any) cannot reasonably be effectuated for the lack of specific substance as observed above. For example, Applicants appears to not observe the burden of providing what is expected of a proper prima facie type of rebut against the rejection, and this includes Applicant's omission in pointing out how Hoskins' teachings as combined with Dole would render the rationale of obviousness improper. Thus, the arguments for lacking prima facie specificity are insufficient to overcome the rejection

This statement from the present Office Action fails to address the substance of Applicant's arguments. Applicant contends, contrary to the assertion of the present Office Action, that at least a portion of the subject matter of claim 1 is not taught by the applied portions of the relied upon references. Applicant presented evidence and a series of questions in order to demonstrate the deficiencies of the 16 June 2006 Office Action. Applicant respectfully submits that a substantive response by the USPTO in the present Office Action would not have been

superfluous and was required by the MPEP. Neither the present Office Action nor the 16 June 2006 Office Action establish a *prima facie* case of obviousness regarding any claim, including claim 1. For at least this reason, the burden remains on the USPTO to provide such a rejection. Applicant has no further burden. Applicant respectfully submits that the present Office Action Reply, as well as the Office Action Reply dated 24 July 2006, each demonstrates that no *prima facie* case of obviousness has been established. Applicant respectfully submits that the complete failure of the present Office Action to address the substance of Applicant's arguments in detail fails to comply with the requirements of MPEP 707.07(f).

As another example, in traversing a rejection of claim 5, Applicant presented the following argument that stands unopposed in the present Office Action:

> *Since claim 5 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, supra.*
>
> *Claim 5 recites, yet the present Office Action **fails to allege** that any of the applied portions of the relied upon references teaches "representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display."*
>
> *Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined,** still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a prima facie case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 5, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. *"select the references";*
2. *"select the teachings of [the] separate references"; or*
3. *"combine [those teachings] in the way that would produce the claimed invention".*

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 5, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a prima facie case of obviousness regarding claim 5. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 5.

The present Office Action fails to respond substantively to this previously presented and persuasive argument. The present Office Action merely asserts, at Page 18:

[a]s for claims 2-18, Applicant has submitted (Appl, Rmrks, pg. 26-37) the same pattern of required steps, i.e. select the references, select the teachings; combine ... that would produce the claimed invention; all of which deemed not commensurate (or in direct relevance) with any of the Dole's cited parts to address the claims. Again, there is no specific material by the Office Action being pointed to here in order for the Examiner to commensurately provide a counter argument based thereupon. A claim comprises features and for each, the Examiner deems that an initial burden of setting forth a prima facie case of rejection has been established and it is Applicant's burden now to point out (and doing so, very precisely in sufficient detail) which part of such Action has lacked a proper teaching that would meeting a very specific claimed feature. The above uncorrelated remarks by Applicants are not proper arguments to legitimately

negate the grounds of rejection; and are deemed not somewhat misplaced in order to overcome the rejections of the above claims.

Applicant respectfully submits that the Reply of 24 July 2006 pointed to "specific material by the Office Action" requiring a substantive response. No substantive response was provided in the present Office Action. Further, Applicant demonstrated that no *prima facie* obviousness was established regarding claim 5 and that the 16 June 2006 Office Action failed to meet that burden. The present Office Action completely failed to rebut this argument or provide such a *prima facie* rejection of at least claim 5.

Applicant further requests clarifications regarding how any of the remarks comprised by the Reply dated 24 July 2006 are "uncorrelated". What are the remarks alleged to be "uncorrelated" with? What is meant by the phrase "uncorrelated remarks"? What legal basis or factual basis does the present Office Action have for asserting that the arguments presented in the traversal of claim 5 (or any of claims 1-52 for that matter) "are not proper arguments to legitimately negate the grounds of rejection"? What is meant by the seemingly internally inconsistent clause "are deemed not somewhat misplaced in order to overcome the rejections of the above claims"?

As still another example, the Office Action Reply dated 24 July 2006 also demonstrated that the Office Action dated 16 June 2006 failed to provide a proper suggestion or motivation for combining the applied portions of Hoskins with the applied portions of Dole to arrive at the claimed subject matter for each of claims 2-18. The response of the present Office Action to these persuasive arguments was limited to the passage quoted, *supra*, regarding those claims. Rather than provide the required response to the substance of Applicant's arguments, the present Office Action merely attempts to mischaracterize and denigrate those arguments. For at least these reasons, the present Office Action fails to comply with the requirements of MPEP 707.07(f) regarding the rejections of each of claims 1-18.

As yet another example, the Reply dated 24 July 2006 traversed the failure of the Office Action dated 16 June 2006 to provide a proper suggestion or motivation for combining the applied portions of Hoskins with the applied portions of Dole to arrive at the claimed subject matter for each of claims 20-35. Again, rather than provide the required substantive response, the present Office Action merely stated:

As for claims 20-35, Applicant has submitted (Appl. Rmrks, pg. 39-49) the

same pattern of required steps, i.e. select the references, select the teachings;

combine ... that would produce the claimed invention; all of which not

commensurate with any of the Dole's cited parts to address the claims.

These remarks would be referred back to section E.

Once again, rather than provide the required substantive response to the substance of

Applicant's arguments, the present Office Action merely attempts to mischaracterize and

denigrate those arguments. For at least these reasons, the present Office Action fails to comply

with the requirements of MPEP 707.07(f) regarding the rejections of each of claims 20-35.

The present Office Action similarly fails to answer the substance of Applicant's argument

presented in the Office Action Reply of 24 July 2006 regarding each of claims 36-52.

For at least these reasons, Applicant respectfully requests the withdrawal of the Office
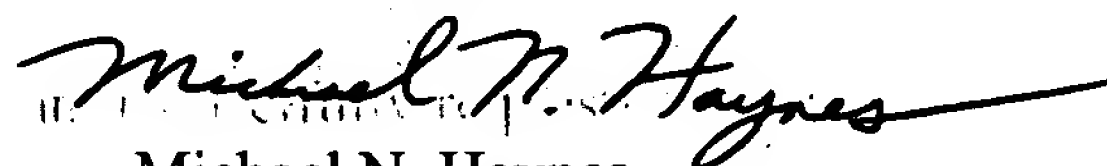
Action dated **23 October 2006**.

Submitted herewith please find the Petition fee under 37 C.F.R. 1.17 (h), which Applicant

respectfully requests be refunded, as well as the RCE fee necessary because of the finality of the

Office Action.

CONCLUSION

The Office is hereby authorized to charge any additional fees or credit any overpayments

under 37 C.F.R. 1.16 or 1.17 to Deposit Account No. 50-2504. The Examiner is invited to

contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

Michael Haynes PLC

Date: 19 December 2006   Michael N. Haynes
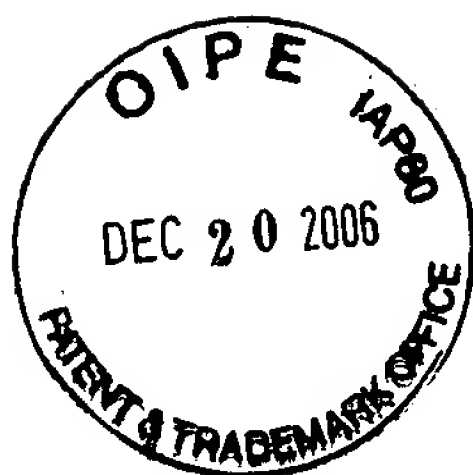   Registration No. 40,014

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Mail Stop Amendment

Commissioner for Patents

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REPLY TO OFFICE ACTION

In reply to the Office Action mailed on 16 June 2006, the three month shortened statutory period for responding to which expires on 16 September 2006, the following amendments and remarks are respectfully submitted:

AMENDMENTS

AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method <u>adapted</u> for representing industrial automation computer program created using a graphical programming language, the method comprising the steps of:

identifying an internal representation of an industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller, the internal representation stored in a computer memory, the internal representation created via a graphical programming language; and

converting the internal representation to a markup language version of the industrial automation computer program.

2.   (Previously Presented) The method according to claim 1, comprising the further step of causing the markup language version of the industrial automation computer program to be stored in a computer data storage device.

3.   (Previously Presented) The method according to claim 1, further comprising the step of transmitting the markup language version of the industrial automation computer program over a network to a receiving computing device.

4.   (Previously Presented) The method according to claim 2, comprising the further steps of retrieving the markup language version of the industrial automation computer program from the computer data storage device and converting the markup language version of the industrial automation computer program to the internal representation in computer memory.

5.   (Previously Presented) The method according to claim 2, comprising the further steps of retrieving the markup language version of the industrial automation computer program from the computer data storage device and representing the retrieved industrial automation computer

program as a corresponding graphical programming language version on a computer display.

6.   (Currently Amended) The method according to claim 5, wherein ~~the~~ a display of the markup language version of the industrial automation computer program is facilitated by a browser.

7.   (Original) The method according to claim 2, wherein the markup language is XML.

8.   (Original) The method according to claim 1, wherein the graphical programming language comprises a flowchart language.

9.   (Original) The method according to claim 1, wherein the graphical programming language comprises a ladder logic language.

10.   (Original) The method according to claim 1, wherein the graphical programming language comprises a function block diagram language.

11.   (Original) The method according to claim 1, wherein the graphical programming language comprises a sequential function chart.

12.   (Original) The method according to claim 7, wherein the graphical programming language comprises a flowchart language.

13.   (Original) The method according to claim 7, wherein the graphical programming language comprises a ladder logic language.

14.   (Original) The method according to claim 7, wherein the graphical programming language comprises a sequential function chart.

15.   (Previously Presented) The method according to claim 7, wherein the graphical programming language comprises a function block diagram language.

16.   (Currently Amended) The method according to claim 1, wherein a ~~the~~ tool utilized in performing said converting step comprises an editor and ~~the conversion~~ said converting step is triggered by invoking an editor command via the tool.

17.   (Previously Presented) The method according to claim 7, comprising the further steps of retrieving the markup language version of the industrial automation computer program from the computer data storage device and representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display.

18.   (Currently Amended) The method according to claim 17, wherein the step of displaying the industrial automation computer program on a computer display device comprises the step of displaying the industrial automation computer program ~~with the use of~~ via a browser.

19.   (Currently Amended) A computer program product, adapted for use in conjunction with a computing device, the computer program product comprising a computer usable medium, the computer usable medium comprising:

computer readable program code adapted for identifying an industrial automation computer program adapted for controlling a programmable logic controller, the industrial automation computer program created via a tool and stored in computer memory in ~~the~~ an internal representation, the industrial automation computer program created using a graphical programming language;

computer readable program code adapted for converting the identified industrial automation computer program from the internal representation to a markup language version of the industrial automation computer program.

20.   (Currently Amended) The computer program product according to claim 19, the

computer usable medium further comprising computer readable program code <u>adapted</u> for causing the converted, markup language version of the industrial automation computer program to be stored in a computer data storage device.

21.   (Currently Amended) The computer program product according to claim 20, the computer usable medium further comprising computer readable program code <u>adapted</u> for causing retrieval of the markup language version of the industrial automation computer program from the computer data storage device and converting the markup language version of the industrial automation computer program to the internal representation in computer memory.

22.   (Currently Amended) The computer program product according to claim 19, the computer usable medium further comprising computer readable program code <u>adapted</u> for causing ~~the~~ <u>a</u> transmission of markup language version of the industrial automation computer program over a network to a receiving computing device.

23.   (Currently Amended) The computer program product according to claim 20, the computer program product further comprising computer readable program code <u>adapted</u> for retrieving the markup language version of the industrial automation computer program from the computer data storage device and representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display.

24.   (Currently Amended) The computer program product according to claim 23, wherein ~~the~~ <u>a</u> display of the markup language version of the ~~code~~ <u>industrial automation computer program</u> is facilitated by a browser.

25.   (Original) The computer program product according to claim 19, wherein the markup language is XML.

26.   (Original) The computer program product according to claim 19, wherein the

graphical programming language comprises a flowchart language.

27.   (Original) The computer program product according to claim 19, wherein the graphical programming language comprises ladder logic.

28.   (Original) The computer program product according to claim 19, wherein the graphical programming language comprises function block diagrams.

29.   (Original) The computer program product according to claim 19, wherein the graphical programming language comprises a sequential function chart.

30.   (Original) The computer program product according to claim 25, wherein the graphical programming language comprises a flowchart language.

31.   (Original) The computer program product according to claim 25, wherein the graphical programming language comprises a ladder logic language.

32.   (Original) The computer program product according to claim 25, wherein the graphical programming language comprises a function block diagram language.

33.   (Original) The computer program product according to claim 25, wherein the graphical programming language comprises a sequential function chart.

34.   (Currently Amended) The computer program product according to claim 19, further comprising computer readable program code adapted for converting the markup language version of the industrial automation computer program to the internal representation.

35.   (Currently Amended) The computer program product according to claim 19, wherein the programming tool comprises an editor, and wherein the conversion is triggered by invoking

an editor command in the ~~graphical programming language~~ editor.

36. (Previously Presented) A computer program product comprising a computer-readable storage medium having stored thereon a computer executable markup language version of an industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller, the industrial automation computer program created using a graphical programming language.

37. (Original) The computer program product according to claim 36, wherein the markup language is XML.

38. (Original) The computer program product according to claim 36, wherein the computer program product is coupled to a computing system that is remotely located from an industrial automation control system.

39. (Currently Amended) A computer program product <u>adapted</u> for permitting a user to create industrial automation computer programs, the product comprising a computer-readable storage medium having computer program code stored on it, the code comprising:

industrial automation graphical programming language code, the graphical programming language code comprising an editor adapted to permit the user to create an industrial automation computer program using graphical elements, the industrial automation computer program being stored in memory in an internal representation during execution, the industrial automation computer program adapted for controlling a programmable logic controller; and

computer program code <u>adapted</u> for converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program.

40. (Currently Amended) The computer program product according to claim 39, further comprising computer program code <u>adapted</u> for converting the industrial automation computer

program from the markup language version of the industrial automation computer program to the internal representation.

41.   (Currently Amended) A method adapted for communicating ~~the~~a logical structure of industrial automation computer program data in order to permit a plurality of application developers to create applications relating to the data, the method comprising the steps of:

creating a schema defining a content model for a markup language version of an industrial automation computer program converted from a graphical language version of the industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller; and

posting the schema for access over a network by ~~the~~ application developers.

42.   (Original) The method according to claim 41, wherein the schema is an XML schema.

43.   (Previously Presented) The method according to claim 41, wherein the industrial automation computer program data comprises flowchart programming instructions.

44.   (Currently Amended) A method adapted for providing an industrial automation computer program from a server system, over a network to which the server system is coupled, and to a client system also coupled to the network, the method comprising the steps of:

accessing a markup language version of the industrial automation computer program, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller;

transmitting the markup language version of the industrial automation computer program over the network in connection with a network address corresponding to the client system, thereby causing the transmitted, markup language version of the industrial automation computer program to be received by the client system.

45.   (Currently Amended) The method according to claim 44, wherein the client system, in response to the ~~received~~ accessed markup language version of the industrial automation computer program, has transmitted to the server system data relating to ~~the~~ an automation to which the markup language version of the industrial automation computer program is directed, and, further, wherein the server system has access to the industrial automation computer program modified in response to receipt of the data from the client system, and wherein the modified industrial automation computer program is provided in a markup language version, the method comprising the further step of:

transmitting the markup language version of the modified industrial automation computer program over the network in connection with a network address corresponding to the client system, thereby causing the transmitted, modified, markup language version of the industrial automation computer program to be received by the client system.

46.   (Previously Presented) The method according to claim 45, wherein the step of transmitting the accessed, markup language version of the industrial automation computer program over the network comprises sending an electronic mail message.

47.   (Currently Amended) The method according to claim 45, wherein the step of transmitting the accessed, markup language version of the industrial automation computer program over the network comprises transmitting the ~~code~~ markup language version of the industrial automation computer program over the network via hypertext transfer protocol.

48.   (Previously Presented) The method according to claim 44, wherein the markup language version of the industrial automation computer program comprises XML.

49.   (Previously Presented) The method according to claim 44, wherein a second client system is coupled to the network, the method further comprising the step of:

transmitting the accessed, markup language version of the industrial automation

computer program over the network in connection with a network address corresponding to the second client system, thereby causing the transmitted, markup language version of the industrial automation computer program to be received by the second client system.

50.   (Currently Amended) The method according to claim 49, wherein the ~~first~~ client system is configured to reconvert the markup language version of the industrial automation computer program to a first internal representation, and wherein the second client system is coupled to the network, the second client configured to reconvert the markup language version of the industrial automation computer program to a second internal representation.

51.   (Currently Amended) A method adapted for programming industrial automation control applications comprising the steps of:

providing a computer system coupled to a network;

configuring the ~~first~~ computer system to receive over the network transmissions of data from a plurality of industrial automation program developer systems; and

receiving data from the plurality of industrial automation program developer systems, the data comprising an industrial automation computer program presented in a markup language version, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller.

52.   (Original) The method according to claim 51, wherein the markup language is XML.

REMARKS

The Examiner is respectfully thanked for the consideration provided to this application. Reconsideration of this application is respectfully requested in light of the foregoing amendments and the following remarks.

Each of claims 1, 6, 16, 18-24, 34, 35, 39-41, 44-45, 47, and 51 has been amended for at least one reason unrelated to patentability, including at least one of: to explicitly present one or more elements implicit in the claim as originally written when viewed in light of the specification, thereby not narrowing the scope of the claim; to detect infringement more easily; to enlarge the scope of infringement; to cover different kinds of infringement (direct, indirect, contributory, induced, and/or importation, etc.); to expedite the issuance of a claim of particular current licensing interest; to target the claim to a party currently interested in licensing certain embodiments; to enlarge the royalty base of the claim; to cover a particular product or person in the marketplace; and/or to target the claim to a particular industry.

Claims 1-52 are now pending in this application. Claims 1, 19, 36, 39, 41, 44, and 51 are the independent claims.

A. The Statutory Subject Matter Rejections

Each of claims 36-38 was rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The present Office Action fails to present any legal basis whatsoever upon which this rejection is based.

Applicant respectfully submits that Federal Circuit case law states that "[w]ithout question, software code **alone** qualifies as an invention eligible for patenting under these [35 U.S.C. 101] categories, at least as processes." *Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.3d 1325, 73 USPQ2d 1782 (Fed. Cir. 2005) (*citing In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994); *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999); MPEP § 2106). Further, MPEP § 2106 IV.B.1.(a) states that "**a claimed computer-readable medium encoded with a computer program** is a computer element which defines structural and

functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and **is thus statutory**."

Independent claim 36, upon which each of claims 37 and 38 depends, recites *inter alia*, "[a] computer program product comprising a computer-readable storage medium having stored thereon **a computer executable markup language version of an industrial automation computer program**".

Applicant respectfully submits that each of claims 36-38 complies with the standards of MPEP § 2106 and, thus, comprises statutory subject matter. Accordingly, reconsideration and withdrawal of these rejections is respectfully requested.

B. The Obviousness Rejections

Each of claims 1-52 was rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,634,008 ("Dole") in view of U.S. Patent No. 6,167,406 ("Hoskins"). These rejections are respectfully traversed.

I. Legal Standards

1. *Prima facie* Obviousness Criteria

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach... all the claim limitations." *See* MPEP 2143.

Moreover, the "Patent Office has the initial duty of supplying the factual basis for its rejection." *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057, *reh'g denied*, 390 U.S. 1000 (1968). "It may not... resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis". Id.

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It is legal error to utilize to "substitute[] supposed per se rules for the particularized inquiry required by section 103. It necessarily produces erroneous results." *See In re Ochiai*, 71 F.3d 1565, 1571, 37 USPQ2d 1127, 1132-33 (Fed. Cir. 1998); *In re Wright*, 343 F.2d 761, 769-770, 145 USPQ 182, 190 (CCPA 1965).

"Once the examiner... carries the burden of making out a *prima facie* case of unpatentability, 'the burden of coming forward with evidence or argument shifts to the applicant.'" *In re Alton*, 76 F.3d 1168, 37 USPQ2d 1578 (Fed. Cir. 1996) (*quoting In re Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444).

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establish a *prima facie* case of obviousness.

2. Motivation or Suggestion to Combine the Applied References

"The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." MPEP 2142. The requirements for fulfilling this burden are explicit and straightforward.

"[T]he examiner **must show reasons** that the skilled artisan, **confronted with the same problems** as the inventor and with no knowledge of the claimed invention, **would select the elements** from the cited prior art references for combination **in the manner claimed**" (emphasis added). *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998). To show these reasons, "[p]articular findings must be made". *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Such factual findings must be supported by "concrete evidence in the record". *In re Zurko*, 258 F.3d 1379, 1385-86, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001).

Moreover, a showing of combinability must be "clear and particular". *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 161(Fed. Cir. 1999). That strong showing is needed because, "**obviousness requires proof** 'that the skilled artisan . . . would select the elements from the cited prior art references for combination in the manner claimed'". *In re Johnston*, 435 F.3d 1381 (Fed. Cir. 2006) (quotation omitted) (emphasis added).

Consequently, an Office Action must clearly and objectively prove that the applied

references are "reasonably pertinent to the **particular** problem with which the invention was involved". *See Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 664, 57 USPQ2d 1161, 1166 (Fed. Cir. 2000); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1535, 218 USPQ 871, 876 (Fed. Cir. 1983); and *Monarch Knitting Machinery Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 881-83, 886, 45 USPQ2d 1977, 1981-82, 1985 (Fed. Cir. 1998).

In addition, "[t]he patent examination process centers on prior art and the analysis thereof. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness." *In re Sang-Su Lee*, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). Thus, the Office Action must clearly and objectively prove some "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

> "select the references";
>
> "select the teachings of [the] separate references"; and
>
> "combine [those teachings] in the way that would produce the claimed invention".

In re Johnston, 435 F.3d 1381 (Fed. Cir. 2006) (internal citations omitted). See also *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (discussing the "the test of whether it would have been obvious to select **specific** teachings and combine them as did the applicant") (emphasis added); and *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985) ("When prior art references require selective combination... to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself."). "The absence of . . . a suggestion to combine is dispositive in an obviousness determination." *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997).

Further, this obviousness standard applies regardless of whether the Office Action relies upon modifying or combining purported teachings.

> *Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious modification of the prior art. The mere fact that the prior art may be modified in*

> *the manner suggested by the Examiner does not make the modification obvious*
> *unless the prior art suggested the **desirability** of the modification ... It is*
> *impermissible to use the claimed invention as an instruction manual or template*
> *to piece together the teachings of the prior art so that the claimed invention is*
> *rendered obvious. This court has previously stated that one cannot use hindsight*
> *reconstruction to pick and choose among isolated disclosures in the prior art to*
> *deprecate the claimed invention.*

In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780, 1783-1784 (Fed. Cir. 1992) (*citing In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985); and *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) (internal quotations omitted) (emphasis added)).

Therefore, the Office Action also must clearly and objectively prove that the "prior art suggested the **desirability**" of that modification or combination. *See also Akamai Techs. v. Cable & Wireless Internet Servs.*, 344 F.3d 1186, 68 USPQ 2d 1186 (Fed. Cir. 2003) ("[w]hen determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the **desirability**, and thus the obviousness, of making the combination.") (emphasis added).

3. Inoperative Combinations

It is inappropriate to combine references when the combination "would produce a seemingly inoperative device." *See, Nat's Steel Car, Ltd. v. Canadian Pac. Ry., Ltd.*, 357 F.3d 1319, 1339 (Fed. Cir. 2004); *Tec Air Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999) (*quoting In re Sponnoble*, 405 F.2d 578, 587 (CCPA 1969).

4. References That Teach Away

Federal Circuit law indicates that references "that teach away cannot serve to create a *prima facie* case of obviousness." *See, In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). If a proposed combination would render a reference inoperable for its intended

purpose, the reference teaches away from the proposed combination. *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 52 USPQ2d 1294 (Fed. Cir. 1994). "If references taken in combination would produce a 'seemingly inoperative device,'... such references teach away from the combination and thus cannot serve as predicates for a *prima facie* case of obviousness". *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 60 USPQ2d 1001, 1010 (Fed. Cir. 2001).

5. Analogous Art to the Claimed Subject Matter

According to the Federal Circuit, in order to be analogous art for an obviousness rejection, a reference must either be (1) within the field of the inventor's endeavor or (2) reasonably pertinent to the particular problem with which the inventor was involved. *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).

II. Analysis

1. Hoskins Teaches Away from the Asserted Combination

Each of independent claims 1, 19, 36, 39, 41, 44, and 51 recite a "markup language" version of an "industrial automation computer program".

Hoskins allegedly recites that "HyperText Markup Language (**HTML**)" (see col. 11, lines 53-54) "**has <u>proven</u> to be inadequate** in the following areas:

- Poor performance;
- Restricted user interface capabilities;
- Can only produce static Web pages; ,
- Lack of interoperability with existing applications and data; and
- Inability to scale"

(see col. 12, lines 4-12).

Instead of HTML, **Hoskins praises non-mark-up languages** such as Java and Active X for "**Web applications**". *See* col. 11, line 65 – col. 12, line 2; col. 12, lines 20-65.

U.S. Patent Number 6,463,578 (Johnson) has been cited as prior art to the present Application in an Information Disclosure Statement filed 24 August 2005. Johnson provides context for determining a proper meaning for the phrase "Java" by stating that:

***Java is an object-oriented programming language** developed by Sun Microsystems, Mountain View, California. Java is a portable and architecturally neutral language. Java source code is compiled into a machine-independent format that can be run on any machine with a Java runtime system known as the Java Virtual Machine (JVM). The JVM is defined as an imaginary machine that is implemented by emulating a processor through the use of software on a real machine. Accordingly machines running under diverse operating systems, including UNIX, Windows 95, Windows NT, and Macintosh having a JVM can execute the same Java program.*

*Java Server Page (JSP) technology is a scripting language technology for controlling the content or appearance of Web pages through the use of server-side applications, known as "servlets." **Servlets are Java applications** that run on a Web server to modify Web pages before they are sent to requesting clients. Servlets may be referred to as server-side applets or applications. Similar to the way applets run on a browser and extend a browser's capabilities, servlets run on a Java-enabled Web server and extend the Web server's capabilities. Servlets use classes and methods in the JavaSoft Java Servlet Application Programming Interface (API). The JavaSoft Java Servlet Application Programming Interface (API) is described at http://www.ibm.com/java/servexp/sedocd.html, which is incorporated herein by reference in its entirety. As is known to those skilled in this art, servlets may be local or remote. That is, servlets may reside on a Web server receiving a request from a Web client or may be located on a server remotely located from the Web server receiving a Web client request.*

*In response to a client request for a Web page, a JSP file referred to in the requested Web page typically is transformed into (or may call) one or more servlets that execute. A JSP file typically contains **source code in a markup language, such***

as HyperText Markup Language (HTML) and Extensible Markup Language
(XML). This source code typically includes all the information needed to call one
or more servlets. A servlet typically generates an HTML response to a requesting
client.

See col. 1, lines 14-50.

Thus, Johnson distinguishes Java from markup languages. Java is an "object-oriented" language. Johnson indicates that "source code in a markup language" includes information needed to call "servlets" written as "Java applications". Thus, Johnson indicates that Java is not a markup language.

U.S. Patent Number 5,842,020 (Faustini) is cited as prior art to the present Application in an Information Disclosure Statement filed herewith. Faustini provides context for determining a proper meaning for the phrase "Java" by stating, at col. 8, lines 40-53, that:

*[a]nother technology that has **function and capability similar to JAVA is***
*provided by Microsoft and its **ActiveX** technology, to give developers and Web*
designers the wherewithal to build dynamic content for the Internet and personal
computers. ActiveX runs only the so-called Wintel platform (a combination of a
version of Windows and an Intel microprocessor), as contrasted with Java which is a
compile once, run anywhere language.

ActiveX includes tools for developing animation, 3-D virtual reality, video and
other multimedia content. The tools use Internet standards, work on multiple
platforms, and are being supported by over one hundred companies. The group's
building blocks are called ActiveX Controls, small, fast components that enable
*developers to **embed parts of software in** hypertext **markup language (HTML)***
***pages.** ActiveX Controls work with a variety of programming languages including*
Microsoft's Visual C++, Borland's Delphi, Microsoft's Visual Basic programming
system and, in the future, Microsoft's development tool for Java, code named
"Jakarta." ActiveX Technologies also includes ActiveX Server Framework, allowing
developers to create server applications

Thus, Faustini distinguishes ActiveX from markup languages. Faustini explains that ActiveX has a function and capability similar to Java, an "object-oriented" language. Faustini indicates that, as with Java servlets, ActiveX controls are called by code written in a "markup language". Thus, Faustini indicates that ActiveX is not a markup language.

Thus, by denigrating markup languages, Hoskins teaches away from using "a markup language" version of "industrial automation" code. As a result, one of ordinary skill in the art would have no motivation to consider Hoskins for combination with Dole to arrive at the claimed subject matter due to the inadequacies of HTML listed by Hoskins.

Regarding this argument the present Office Action argues, *inter alia*, at Page 16, that the:

> *rejection has been construed in accordance with the teachings by Hoskins in the context that Markup language is still the main language to transport other code applications or executable like Java or ActiveX ... For one skill [sic] in the art, it would be incorrect to perceive that Hoskins for taking advantage of additional embedded ActiveX objects (written in a non-Markup language) to enhance the incorporating of needed data within browser pages for a specific purpose would teach away from the use of markup language ...*

Applicant respectfully submits that this argument of the present Office Action is utterly devoid of evidence beyond apparent Official Notice regarding unsupported characterizations of Hoskins and alleged knowledge possessed by one skilled in the art. Accordingly, Applicant respectfully requests provision of references supporting each and every evidentiary allegation of the present Office Action presented in support of an apparent bald assertion that "For one skill [sic] in the art, it would be incorrect to perceive that Hoskins for taking advantage of additional embedded ActiveX objects (written in a non-Markup language) to enhance the incorporating of needed data within browser pages for a specific purpose would teach away from the use of markup language".

Applicant respectfully submits that, in light of evidence presented, Hoskins may not be properly combined with Dole. Applicant further submits that, at least as a result of Hoskins teaching away from the proffered combination, that the cited references fail to establish a *prima facie* case of obviousness. Because no *prima facie* rejection of any independent claim has been

presented, no *prima facie* rejection of any dependent claim can be properly asserted.
Consequently, reconsideration and withdrawal of each rejection of claims 1-52 is respectfully
requested.

2. Dole is Non-analogous Art to Claimed Subject Matter

Dole allegedly recites, at the Abstract:

> *[a]n environment for designing integrated circuits. Computers include browsers for displaying pages of forms, with the computers in communication with a methodology server and a compute server. The methodology server contains design methodologies accessed by the computers, with the design methodologies defining steps of designing and testing of integrated circuits. The computers or methodology server are also in communication with a compute server. The compute server executes electronic design automation tools as requested.*

Thus, Dole relates to designing and testing "integrated circuits".

By contrast, the present Application states that the field of the invention is "graphical
programming languages for programmable logic controllers. In particular, the invention
concerns a method and system for standardized storage of graphical programming languages.
See Page 1.

One skilled in the art at the time of the invention would not have found that "designing
and testing of integrated circuits" to be in the same field of endeavor as "graphical programming
languages for programmable logic controllers".

Likewise, one skilled would not find "designing and testing of integrated circuits" to be
"reasonably pertinent to the particular problem with which the inventor was involved" in
"standardized storage of graphical programming languages".

Further, because they are directed at vastly different problems, one of skill in the art
would consider Dole to be non-analogous art to that of Hoskins.

Thus, Dole is nonanalogous art to the present Application and is not available as a
reference for combination with Hoskins.

The present Office Action responds to this argument by asserting that "the rejection is based on the fact that industry automation can be circuit design/testing as by Dole and that a hardware circuit being targeted in Dole's automation application can be a PLC." See Page 17.

Applicant respectfully submits this argument of the present Office Action to be non-responsive and irrelevant. Even if the argument were technically correct, a premise that Applicant respectfully traverses, "industry automation" is not claimed subject matter, a stated field of endeavor of either Dole or the present Application, or a problem stated to be solved by either Dole or the present Application. Likewise, even if a "hardware circuit" produced according to the teachings of Dole could be used in "a PLC", a premise that Applicant respectfully submits that is unsupported at best, the use of a "hardware circuit" is not claimed subject matter, a stated field of endeavor of either Dole or the present Application, or a problem stated to be solved by either Dole or the present Application.

Applicant respectfully reiterates that one skilled in the art at the time of the invention would not have found that "designing and testing of integrated circuits" to be in the same field of endeavor as "graphical programming languages for programmable logic controllers".

Accordingly, Applicant respectfully requests withdrawal of the rejection of each of claims 1-52 based thereon.

3. Claim 1

Claim 1 recites, *inter alia*, "**identifying an internal representation of an** industrial automation computer program, the **industrial automation computer program adapted for controlling a programmable logic controller**, the internal representation stored in a computer memory, the internal representation created via a graphical programming language; and **converting the internal representation to a markup language version of the industrial automation computer program**". The applied portions of the relied upon references do not teach a "identifying an internal representation of an industrial automation computer program, the **industrial automation computer program adapted for controlling a programmable logic controller**, the internal representation stored in a computer memory, the internal representation created via a graphical programming language; and **converting the internal representation to a**

markup language version of the industrial automation computer program".

The present Office Action relies upon "Fig. 10; col. 16, lines 10-47; Fig. 13" of Dole as allegedly teaching "**converting** the internal representation **to a markup language** version of the industrial automation computer program". Yet, FIG. 10 of Dole allegedly illustrates:
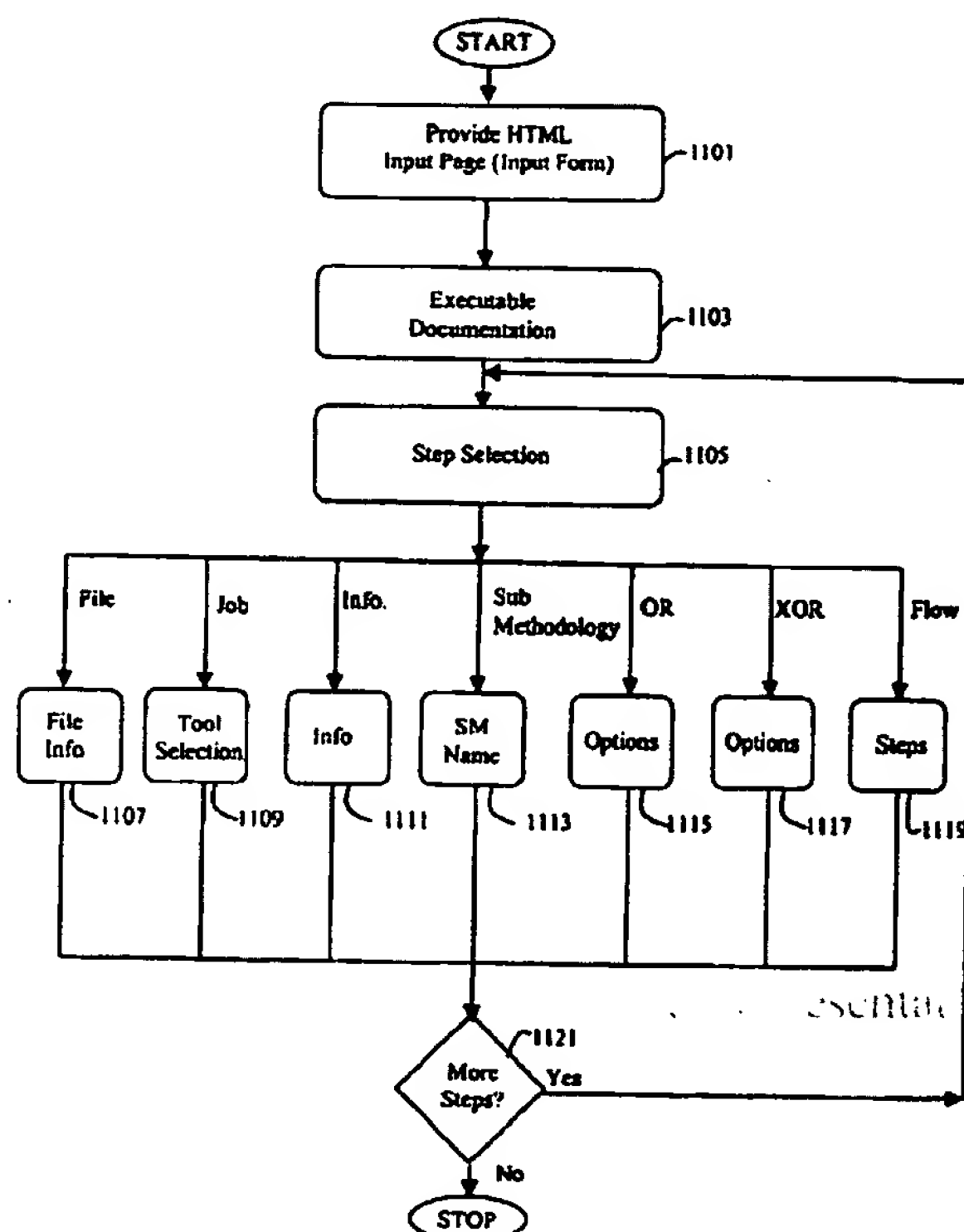

FIG. 10

Applicant respectfully asks, where does this relied upon FIG. 10 of Dole teach "**converting** the internal representation **to a markup language** version of the industrial automation computer program"? Moreover, FIG. 13 of Dole allegedly illustrates:
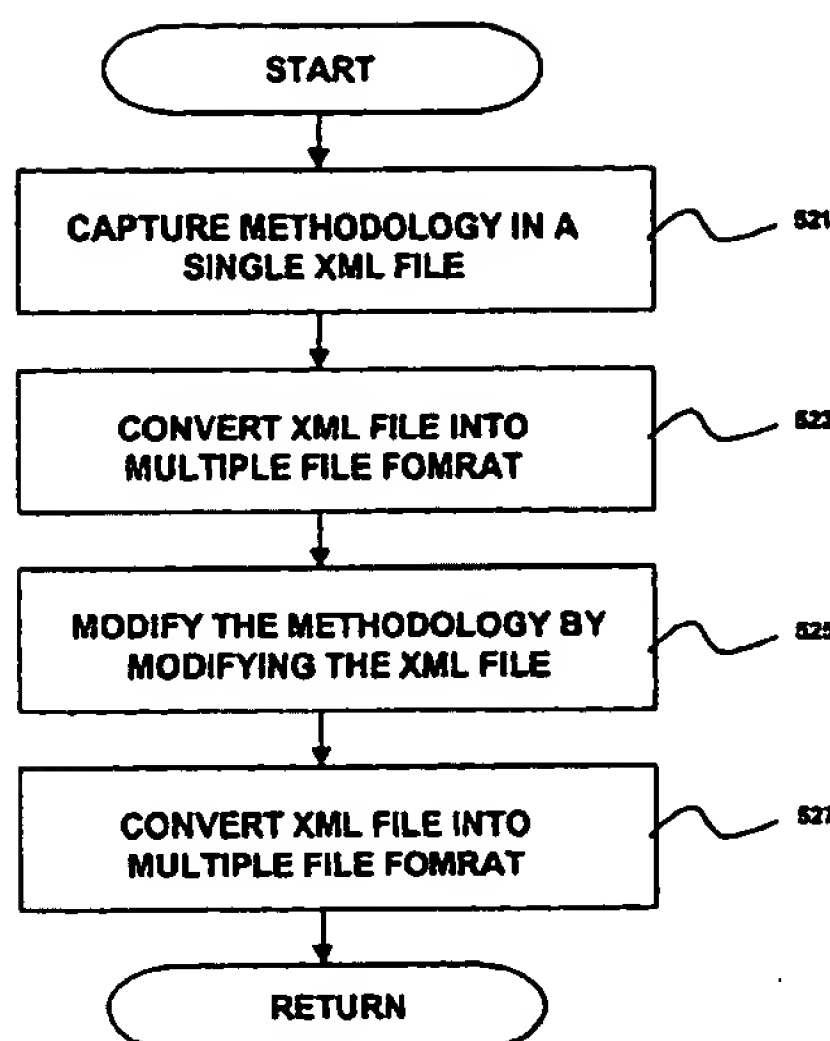
```
                    ┌──────────────┐
                    │    START     │
                    └──────────────┘
                           │
                           ▼
              ┌─────────────────────────┐
              │  CAPTURE METHODOLOGY IN A │ ~ 521
              │     SINGLE XML FILE       │
              └─────────────────────────┘
                           │
                           ▼
              ┌─────────────────────────┐
              │   CONVERT XML FILE INTO   │ ~ 523
              │   MULTIPLE FILE FOMRAT    │
              └─────────────────────────┘
                           │
                           ▼
              ┌─────────────────────────┐
              │  MODIFY THE METHODOLOGY BY│ ~ 525
              │   MODIFYING THE XML FILE  │
              └─────────────────────────┘
                           │
                           ▼
              ┌─────────────────────────┐
              │   CONVERT XML FILE INTO   │ ~ 527
              │   MULTIPLE FILE FOMRAT    │
              └─────────────────────────┘
                           │
                           ▼
                    ┌──────────────┐
                    │    RETURN    │
                    └──────────────┘
```

FIG. 13

Applicant respectfully asks, where does this relied upon FIG. 13 of Dole teach "**converting** the internal representation **to a markup language** version of the industrial automation computer program"? Further, col. 16, lines 10-47 of Dole allegedly recite:

> *[a]lthough HTML based forms are typically used to capture design methodologies, it is often more desirable to use XML (Extensible Markup Language) script to define design methodologies because of advantages that XML has over HTML. In XML, information is divided into useful components called elements, e.g., titles, paragraphs and part numbers. The elements may be formatted, sorted, or searched in consistent fashion. The elements are typically named and defined in a computer program called a Document Type Definition (DTD)*
>
> *Using XML, a methodologist is able to create a single file to describe each design methodology. The single file that describes the design methodology may be used to create other files needed to execute the design methodology. For example, new features can be added to XML over time since XML is an extensible language. In addition, parsers are easy to develop using XML. For example, the*

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parsers may be partially generated automatically from the DTD. Further, XML sources may be scanned by various different programs for different purposes. For example, a source code based on XML may be scanned by a search engine.

Another benefit of using XML is that XML is capable of providing multiple language support. For another example, an XML file is easy to create provided that a good DTD has been created. In addition, an XML-based DTD file may be used to specify the internal nature of the XML files used to define design methodologies. Further, XML hyper-linking is more powerful than HTML hyper-linking, and XML hyper-linking may be used to refer to parts of other XML files. Widely used web browsers may not have a capability to display pages having embedded XML. Therefore, in an alternate embodiment, rather than using an input page to capture design methodology, a methodologist creates an XML script defining a design methodology in a single file. In this embodiment, the XML files are used by Common Gateway Interfaces (CGI's) to drive the integrated circuit design and fabrication system rather than directly viewed using a browser.

Applicant respectfully asks, where does this relied upon portion of Dole teach:

1. "converting" anything?
2. "converting" anything to "a markup language version"?
3. "an internal representation [of an industrial automation control program adapted for controlling a programmable logic controller]"?
4. **"converting the internal representation to a markup language version of the industrial automation computer program"?**

Applicant respectfully submits that at least this claimed subject matter is absent from the applied portions of Dole. The applied portions of Hoskins do not overcome at least these deficiencies of Dole.

Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is

respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined,** still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Further, the present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.*

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;

    2. "select the teachings of" Dole for combination with Hoskins; and

    3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 1. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 1.

4. Claim 2

Since claim 2 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 2, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 2, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 2. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 2.

5. Claim 3

Since claim 3 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 3, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 3, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 3. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 3.

6. Claim 4

Since claim 4 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 4, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 4, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 4. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 4.

7. Claim 5

Since claim 5 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra.*

Claim 5 recites, yet the present Office Action **fails to allege** that any of the applied portions of the relied upon references teaches "representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display."

Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined,** still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 5, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 5, even if such a combination would produce the claimed subject matter (a premise respectfully traversed

by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 5. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 5.

8. Claim 6

Since claim 6 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 6, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 6, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 6. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 6.

9. Claim 7

Since claim 7 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 7, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 7, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 7. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 7.

10. Claim 8

Since claim 8 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 8, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 8, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 8. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 8.

11. Claim 9

Since claim 9 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 9, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 9, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 9. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 9.

12. Claim 10

Since claim 10 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 10, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 10, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 10. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 10.

13. Claim 11

Since claim 11 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 11, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 11, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 11. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 11.

14. Claim 12

Since claim 12 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 12, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 12, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 12. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 12.

15. Claim 13

Since claim 13 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 13, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 13, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 13. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 13.

16. Claim 14

Since claim 14 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 14, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 14, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

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Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 14. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 14.

17. Claim 15

Since claim 15 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 15, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 15, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 15. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 15.

18. Claim 16

Since claim 16 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 16, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 16, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 16. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 16.

19. Claim 17

Since claim 17 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 17, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 17, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 17. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 17.

20. Claim 18

Since claim 18 is dependent upon independent claim 1, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 1, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 18, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 18, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 18. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 18.

21. Claim 19

Claim 19 recites, *inter alia*, yet the present Office Action fails to allege that any applied portion of any relied upon reference teaches "computer readable program code adapted for identifying an industrial automation computer program adapted for controlling a programmable logic controller, the industrial automation computer program created via a tool and stored in computer memory in an internal representation, the industrial automation computer program created using a graphical programming language".

Claim 19 recites, *inter alia*, yet the present Office Action **fails to allege** that any applied

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portion of any relied upon reference teaches "computer readable program code adapted for converting the identified industrial automation computer program from the internal representation to a markup language version of the industrial automation computer program".

Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined,** still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Further, the present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time*
> *the invention was made to apply the circuit synthesis tool, control data*
> *communication and web markup conversion as taught by Dole so that the target*
> *to be designed would be a control logic of a integrated chip having control*
> *functionality of a PLC such as taught by Hoskins. One would be motivated to do*
> *so because the internet based control applied to industrial design and control as*
> *endeavor by both Dole and Hoskins can enable simultaneous control from*
> *multiple developers as set forth above, and using this framework as by Hoskins*
> *would enable industrial logic as perceived by Dole to target for design of PLC as*

> *one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.*

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;

2. "select the teachings of" Dole for combination with Hoskins; and

3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 1. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 1.

22. Claim 20

Since claim 20 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 20, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 20, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 20. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 20.

23. Claim 21

Since claim 21 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 21, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 21, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 21. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 21.

24. Claim 22

Since claim 22 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 22, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 22, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 22. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 22.

25. Claim 23

Since claim 23 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Claim 23 recites, yet the present Office Action **fails to allege** that any of the applied portions of the relied upon references teaches "representing the retrieved industrial automation computer program as a corresponding graphical programming language version on a computer display."

Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined**, still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 23, of any "suggestion, motivation, or teaching in the prior art

that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 23, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 23. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 23.

26. Claim 24

Since claim 24 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 24, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 24, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 24. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 24.

27. Claim 25

Since claim 25 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 25, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 25, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 25. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 25.

28. Claim 26

Since claim 26 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 26, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 26, even if such a combination would produce the claimed subject matter (a premise respectfully traversed

by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 26. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 26.

29. Claim 27

Since claim 27 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 27, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 27, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 27. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 27.

30. Claim 28

Since claim 28 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 28, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 28, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 28. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 28.

31. Claim 29

Since claim 29 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 29, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references"; u. .· ∴ Dole with ∴. ..

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 29, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 29. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 29.

32. Claim 30

Since claim 30 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 30, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 30, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 30. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 30.

33. Claim 31

Since claim 31 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 31, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 31, even if

such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 31. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 31.

34. Claim 32

Since claim 32 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 32, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 32, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 32. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 32.

35. Claim 33

Since claim 33 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 33, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 33, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 33. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 33.

36. Claim 34

Since claim 34 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 34, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 34, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 34. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 34.

37. Claim 35

Since claim 35 is dependent upon independent claim 19, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 19, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 35, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 35, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 35. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 35.

38. Claim 36

Regarding claim 36, the present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data*

communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;
2. "select the teachings of" Dole for combination with Hoskins; and
3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 36. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 36.

39. Claim 37

Since claim 37 is dependent upon independent claim 36, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 36, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 37, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 37, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 37. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 37.

40. Claim 38

Since claim 38 is dependent upon independent claim 36, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 36, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 38, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 38, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 38. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 38.

41. Claim 39

Claim 39 recites, *inter alia*, "industrial automation graphical programming language code, the graphical programming language code comprising an editor adapted to permit the user to create an industrial automation computer program using graphical elements, the industrial automation computer program being stored in memory in an internal representation during execution, **the industrial automation computer program adapted for controlling a programmable logic controller**; and computer program code adapted for **converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program**". The applied portions of the relied upon references do not teach a "industrial automation graphical programming language code, the graphical programming language code comprising an editor adapted to permit the user to create an industrial automation computer program using graphical elements, the industrial automation computer program being stored in memory in an internal representation during execution, **the industrial automation computer program adapted for controlling a programmable logic controller**; and computer program code adapted for **converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program**".

The present Office Action relies upon "col. 7, lines 26-42; Fig. 10; col. 16, lines 10-47; Fig. 13" as allegedly teaching "computer program code adapted for **converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program**". Each of Fig. 10, col. 16, lines 10-47, and Fig. 13 are presented, supra, regarding the traversal of claim 1. Dole allegedly recites, at col. 7, lines 26-42:

> *[t]he interface and flow control tool encompasses HTML pages and CGI scripts. The HTML pages include input forms for defining methodologies, including steps of methodologies, as well as chip and block home pages and executable methodologies. The CGI scripts receive and act on data input to the*

input forms to create files defining methodologies, chips and blocks, and

executable methodologies attached to chips and blocks. The CGI scripts also

cause execution of electronic design automation (EDA) tools residing on the

compute servers (illustrated in FIG. 2).

Accordingly, the design server contains files 303. The files are created by

the CGI scripts in response to input to the input forms applying new

methodologies, and responsive to input to input forms attaching methodologies to

chips or blocks. In addition, in one embodiment the files include files and

libraries comprising design data formed as the result of the execution of the EDA

tools.

Applicant respectfully asks, where does this relied upon portion of Dole teach:

1. "converting" anything?

2. "converting" anything to "a markup language version"?

3. "an internal representation [of an industrial automation control program adapted for controlling a programmable logic controller]"?

4. **"converting the industrial automation computer program, stored in memory in the internal representation, from the internal representation to a markup language version of the industrial automation computer program"?**

Applicant respectfully submits that at least this claimed subject matter is absent from the applied portions of Dole. The applied portions of Hoskins do not overcome at least these deficiencies of Dole.

Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined,** still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and

withdrawal of these rejections is respectfully requested.

Further, the present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.*

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;
2. "select the teachings of" Dole for combination with Hoskins; and
3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination

would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 39. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 39.

42. Claim 40

Since claim 40 is dependent upon independent claim 39, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 39, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 40, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 40, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 40. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 40.

43. Claim 41

Claim 41 recites, *inter alia*, "creating a schema defining a content model for a markup language version of an industrial automation computer program **converted from a graphical language version of the industrial automation computer program**, the industrial automation computer program adapted for controlling a programmable logic controller". The present Office Action alleges that this claimed subject matter is taught by Dole at "synthesis tool, behavioral model, schematic – col. 12, lines 5-48; DAG – col. 1, lines 52-55; col. 17, lines 22-27; FIG. 23;

step 405-407 – FIG. 9; col. 12, lines 42-55".

Yet, Dole allegedly recites, at col. 12, lines 5-48:

> [a]fter the specification phase, a series of steps 405,407, 409, 411, 413,
> 415 are carried out that result in a physical design of the circuit. Each step in the
> design process may require one or more iterations until that stage of the design
> has been satisfactorily completed. Also, after two or more steps are completed, it
> may be realized that the cumulative solution obtained at the stage is inadequate
> and must be reiterated. Tracking of the design process is therefore sometimes
> difficult. The problems of tracking progress of the design process is compounded
> when design teams implementing each task are located in remote locations,
> making communications difficult.

> Step 405 of the process is the generation of a register transfer level (RTL)
> model. Generation of the RTL model is required if no preexisting block exists,
> such as when a block must be designed from scratch. The RTL model represents
> the block behavior of the design. The RTL model is a synthesizable behavioral
> model that is translated into a structural model providing a logic level description
> of the system. The generation of the RTL model is accomplished using
> methodologies previously selected.

> Step 407 of the process is the synthesis of the circuitry necessary to
> implement the logic functions of the RTL model. The designer synthesizes the
> circuit using a methodology including a synthesis tool. The methodology
> corresponds to one or some of the methodologies previously selected. An analysis
> program optionally may be executed as part of this step, with the analysis
> program used to verify that the output of the synthesis step behaves in accordance
> with the product specification. The use of the analysis program is generally
> specified as a separate methodology, although it may be a sub-methodology or
> step of the synthesis methodology.

> Step 409 of the process is simulation of the overall design. All of the
> components of the design are assembled and a simulation is run. The simulation

tool, test vector generation, and other matters are determined by the selected

methodologies. The design is adjusted until satisfactory simulation results are

obtained. At this point in the design cycle, a satisfactory design consists of a

schematic that contains components such as transistors that may be built on the

integrated circuit, and that when simulated using appropriate models give

appropriate results. This model generally does not take into consideration the

physical layout of these components on the integrated circuit substrate.

Further, Dole allegedly recites, at col. 1, lines 52-55, "[a]ccordingly, each of the blocks must be supported by a testing tool used to verify the functionality of the integrated circuit as a whole." Dole allegedly recites, at col. 17, lines 22-27:

[t]hus, a methodologist is given control over selecting which steps are

compressible. In one embodiment, once the methodologist selects the

compressible file steps, the information contained in a directed acyclic graph

(DAG) is used to automate the tedious chore of determining when files are to be

compressed.

Dole allegedly illustrates at FIG. 23:

FIG.23
VERILOG INTERFACE DESIGN FLOW
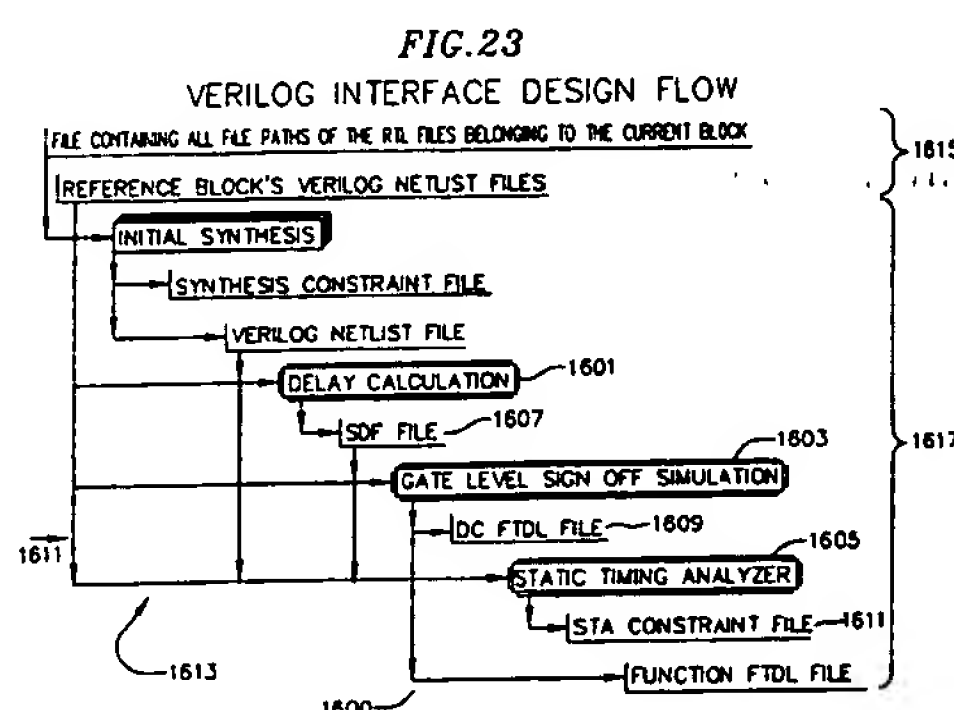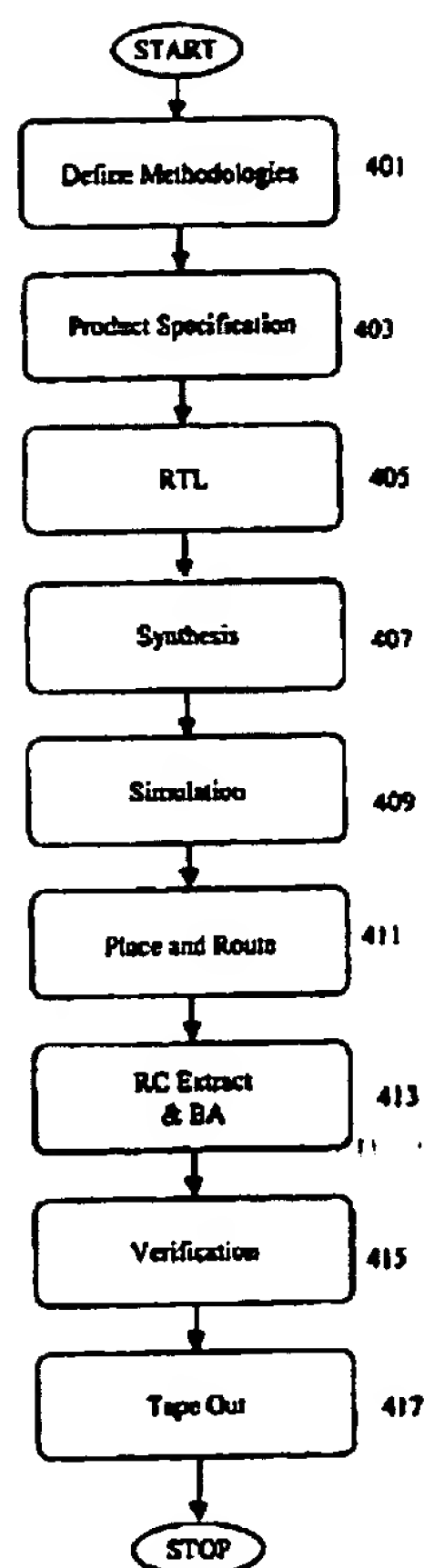
Dole allegedly illustrates at FIG. 9:

FIG. 9

Dole allegedly recites, at col. 12, lines 42-55:

> *[a]t this point in the design cycle, a satisfactory design consists of a schematic that contains components such as transistors that may be built on the integrated circuit, and that when simulated using appropriate models give appropriate results. This model generally does not take into consideration the physical layout of these components on the integrated circuit substrate.*
>
> *Step 411 of the process is placing the components of the design on the substrate and routing of signal to and from the components. Place and route is generally accomplished using one or more place and route tools. The place and route tools used are specified by the selected methodologies. The output of the place and route is a representation physical layout of the integrated circuit as it is built.*
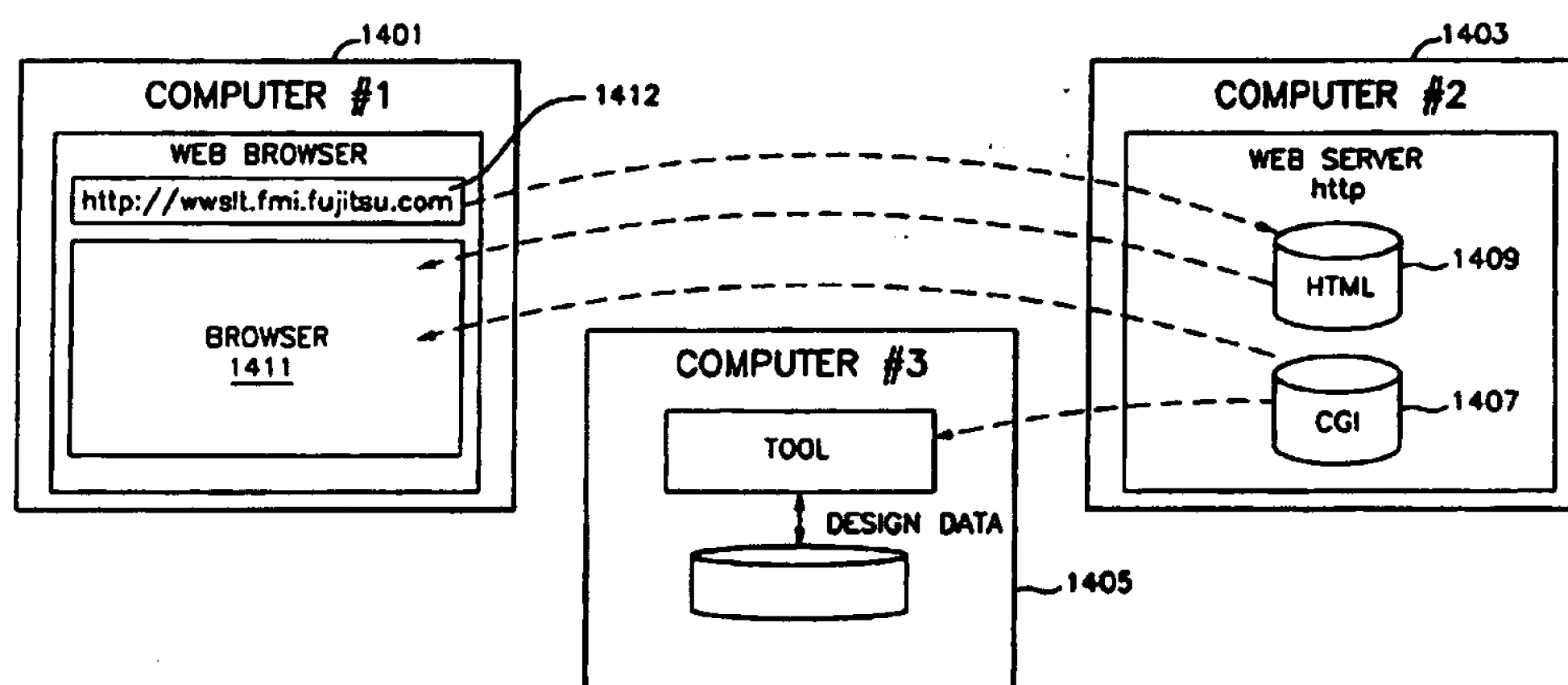
Applicant respectfully asks for an explanation regarding how and where any of these

applied portions of Dole teach a "creating a schema defining a content model for a markup language version of an industrial automation computer program **converted from a graphical language version of the industrial automation computer program**, the industrial automation computer program adapted for controlling a programmable logic controller". Applicant respectfully submits that no applied portion of any relied upon reference teaches at least this claimed subject matter.

Claim 41 recites "**posting the schema** for access over a network by application developers."

The present Office Action relies upon "Fig. 5; Fig. 13" as allegedly teaching "**posting the schema** for access over a network by application developers". FIG. 13 is presented, supra, regarding the traversal of claim 1. Dole allegedly illustrates, at FIG 5:

FIG.5

Applicant respectfully asks, where do either of the relied upon portions of Dole teach:

1. a "schema" of anything?

2. "**posting the schema** for access over a network by application developers"?

Applicant respectfully submits that at least this claimed subject matter is absent from the applied portions of Dole. The applied portions of Hoskins do not overcome at least these deficiencies of Dole.

Thus, even if there were motivation or suggestion to modify or combine the applied portions of the references relied upon in the Office Action (an assumption that is respectfully

traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined,** still do not expressly or inherently teach **every** limitation of the independent claims, and consequently fail to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Further, the present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.*

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have

led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;

2. "select the teachings of" Dole for combination with Hoskins; and

3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 41. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 41.

44. Claim 42

Since claim 42 is dependent upon independent claim 41, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 41, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 42, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 42, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 42. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 42.

45. Claim 43

Since claim 43 is dependent upon independent claim 41, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 41, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 43, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 43, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 43. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 43.

46. Claim 44

The present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data*

communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;

2. "select the teachings of" Dole for combination with Hoskins; and

3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 44. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 44.

47. Claim 45

Since claim 45 is dependent upon independent claim 44, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 44, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 45, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 45, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 45. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 45.

48. Claim 46

Since claim 46 is dependent upon independent claim 44, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 44, *supra.*

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 46, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 46, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 46. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 46.

49. Claim 47

Since claim 47 is dependent upon independent claim 44, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 44, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 47, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

    1. "select the references";

    2. "select the teachings of [the] separate references"; or

    3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 47, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 47. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 47.

50. Claim 48

Since claim 48 is dependent upon independent claim 44, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 44, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 48, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 48, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 48. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 48.

51. Claim 49

Since claim 49 is dependent upon independent claim 44, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 44, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 49, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 49, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 49. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 49.

52. Claim 50

Since claim 50 is dependent upon independent claim 44, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 44, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 50, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";

2. "select the teachings of [the] separate references"; or

3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 50, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 50. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 50.

53. Claim 51

The present Office Action fails to present legally sufficient evidence of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Instead, regarding selected proffered combinations, the present Office Action presents a logically convoluted argument that recites, at Pages 5-6, *inter alia*:

> *it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply the circuit synthesis tool, control data communication and web markup conversion as taught by Dole so that the target to be designed would be a control logic of a integrated chip having control functionality of a PLC such as taught by Hoskins. One would be motivated to do so because the internet based control applied to industrial design and control as endeavor by both Dole and Hoskins can enable simultaneous control from multiple developers as set forth above, and using this framework as by Hoskins would enable industrial logic as perceived by Dole to target for design of PLC as one of circuitries as endeavored by Dole based on the facilitated communication as set by Hoskins.*

Applicant respectfully submits that the reasoning of this argument, as well as that leading up to it, is logically convoluted and largely unparseable. Applicant respectfully asks, where does the prior art provide any "suggestion, motivation, or teaching **in the prior art** that would have led a person of ordinary skill in the art to":

1. "select the reference[]" of Dole for combination with Hoskins;
2. "select the teachings of" Dole for combination with Hoskins; and
3. "combine [those teachings] in the way that would produce the claimed invention"?

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 51. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 51.

54. Claim 52

Since claim 52 is dependent upon independent claim 51, Applicant respectfully incorporates by reference each traversal of the present Office Action regarding claim 51, *supra*.

Further, the present Office Action fails to present any evidence whatsoever, regarding the additional subject matter of claim 52, of any "suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to":

1. "select the references";
2. "select the teachings of [the] separate references"; or
3. "combine [those teachings] in the way that would produce the claimed invention".

Applicant respectfully submits that no legally sufficient evidence has been presented regarding a suggestion or motivation to combine Dole with Hoskins regarding claim 52, even if such a combination would produce the claimed subject matter (a premise respectfully traversed by Applicant).

Thus, the present Office Action fails to establish a *prima facie* case of obviousness regarding claim 52. Accordingly, Applicant respectfully requests a withdrawal of the rejection of claim 52.

C. Allowable Subject Matter

A potential statement of reasons for the indication of allowable subject matter is:

"none of the references of record, alone or in combination, expressly or inherently teach the combination of limitations found in the independent claims. Namely,

claims 1-18 are allowable because none of the references of record alone or in combination teach 'identifying an internal representation of an industrial automation computer program, the industrial automation computer program adapted for controlling a

programmable logic controller, the internal representation stored in a computer memory, the internal representation created via a graphical programming language';

claims 19-35 are allowable because none of the references of record alone or in combination teach 'computer readable program code for identifying an industrial automation computer program adapted for controlling a programmable logic controller, the industrial automation computer program created via a tool and stored in computer memory in the internal representation, the industrial automation computer program created using a graphical programming language';

claims 36-38 are allowable because none of the references of record alone or in combination teach 'computer program product comprising a computer-readable storage medium having stored thereon a representation of an industrial automation computer program as a markup language version of the industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller, the industrial automation computer program created using a graphical programming language';

claims 39-40 are allowable because none of the references of record alone or in combination teach 'industrial automation graphical programming language code, the graphical programming language code comprising an editor adapted to permit the user to create an industrial automation computer program using graphical elements, the industrial automation computer program being stored in memory in an internal representation during execution, the industrial automation computer program adapted for controlling a programmable logic controller';

claims 41-43 are allowable because none of the references of record alone or in combination teach 'creating a schema defining a content model for a markup language version of an industrial automation computer program converted from a graphical language version of the industrial automation computer program, the industrial automation computer program adapted for controlling a programmable logic controller';

claims 44-50 are allowable because none of the references of record alone or in combination teach 'accessing a markup language version of the industrial automation

computer program, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller'; and

claims 51-52 are allowable because none of the references of record alone or in combination teach 'receiving data from the plurality of industrial automation program developer systems, the data comprising an industrial automation computer program presented in a markup language version, the markup language version of the industrial automation computer program converted from a representation created using a graphical programming language, the industrial automation computer program adapted for controlling a programmable logic controller".

CONCLUSION

It is respectfully submitted that, in view of the foregoing amendments and remarks, the application as amended is in clear condition for allowance. Reconsideration, withdrawal of all grounds of rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. 1.16 or 1.17 to Deposit Account No. 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

Michael Haynes PLC

Date: 24 July 2006

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